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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,299	01/10/2001	David Clarke Pollock	HEM 99/607 (A-2911)	9699

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EXAMINER	
PRONE, JASON D	
ART UNIT	**PAPER NUMBER**
3724	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/758,299	POLLOCK ET AL.	
	Examiner	Art Unit	
	Jason Prone	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,7-11 and 22-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,7-11 and 22-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 5, 7-11, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fr. 470,543 in view of Spengler (4,014,234) further in view of Shore et al. (5,526,726). Fr. 470,543 discloses the invention including a frame (Inherent), a pair of cylinders disposed opposite one another with a gap in-between (C and D), that the pair of cylinders includes a first cutting cylinder (C) having a periphery with a cutting knife disposed helically about the periphery (E), and a second cylinder (D). However, Fr. 470,543 fails to disclose one drive rotating the first cutting cylinder, a sub-frame having a pivot point, that the sub-frame supports the cylinders and first and second drives, a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point, a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder, a second drive rotates and mounts the second cylinder, that the first and second drives are motors, and that the first and second drives are gears, that a component of travel of a point of contact between the cylinders in a direction of travel of the work piece matches a speed of the work piece for cutting in a straight line, a sensor connected to the control unit and disposed in the travel path of the work piece, providing control signals to the control unit

for controlling operation of the cylinders and monitoring the cutting operation, that the sensors detect an unacceptable cut, and that the control unit is a microprocessor. Spengler teaches one drive rotating the first cutting cylinder (Abstract), a sub-frame (32) having a pivot point (29), that the sub-frame supports the cylinders and first and second drives (Fig. 3), a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point (45), a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder (Column 5 lines 40-52), a second drive rotates and mounts the second cylinder (Abstract), that the first and second drives are motors (6), and that the first and second drives are gears (7), and that a component of travel of a point of contact between the cylinders in a direction of travel of the work piece matches a speed of the work piece for cutting in a straight line (Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have provided Fr. 470,543 with a pivoting sub-frame and drives, as taught by Spengler, to allow for different angles to be cut into the work piece and to more efficiently run the cutting drums.

Shore et al. teaches a sensor, connected to the control unit and disposed in the travel path of the work piece, providing control signals to the control unit for controlling operation of the cylinders and monitoring the cutting operation, that the sensors detect an unacceptable cut, and that the control unit is a microprocessor (Column 1 lines 15-26). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have replaced the user input control unit of Fr. 470,543 in view of Spengler with the sensors and control unit as taught by Shore et al. in order to provide

Fr. 470,543 in view of Spengler with a more accurate and faster control of the cutting conditions.

Response to Arguments

3. Applicant's arguments filed 03 January 2005 have been fully considered but they are not persuasive. Applicant uses the "open language" term "comprising" in the claims. That being said, Fr. 470,543 clearly discloses a cutting knife, as claimed. Fr. 470,543 has 2 sets of one cutting knife. The claims do not recite any structure regarding the second cylinder. Therefore, Fr. 470,543 clearly discloses a second cylinder as claimed. Spengler modifies the structure of Fr. 470,543 to incorporate one drive rotating the first cutting cylinder (Abstract), a sub-frame (32) having a pivot point (29), that the sub-frame supports the cylinders and first and second drives (Fig. 3), a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point (45), a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder (Column 5 lines 40-52), a second drive rotates and mounts the second cylinder (Abstract), and that the first and second drives are motors (6), and that the first and second drives are gears (7). With this combination, Fr. 470,543 in view of Spengler clearly is capable of altering the length of the severed signatures by controlling the angle (45 in Spengler) and the speed of the cutting rollers (Column 5 lines 40-52 in Spengler). Shore et al. clearly teaches that the use of sensors to control the operation of cutters is old and well know. Therefore, the combination of Fr. 470,543 in view of Spengler (4,014,234) further in view of Shore et

al. (5,526,726) clearly disclose all structure as claimed and, therefore, capable of performing all intended uses.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 571-272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JP
March 15, 2005

Allan N. Shoap
Supervisory Patent Examiner
Group 3700